



# SIKA AT WORK

## MEISTERN TUNNEL, BAD WILDBAD, GERMANY

MEISTERN RESCUE TUNNEL WITH SPECIAL DEMANDS DUE TO THERMAL SPRING WATER

BUILDING TRUST



# MEISTERN TUNNEL, BAD WILDBAD, GERMANY



## PROJECT DESCRIPTION

The Meistern tunnel was built in 1996 as a local bypass for the town of Bad Wildbad. The 1684 m long, single tube tunnel is bidirectional.

In a second step, a parallel rescue tunnel is now constructed at a distance of 15 to 20 m from the main tunnel and is linked to it by five crosscuts.

This project comprises 1255 m tunnel construction of about 5 m in diameter and the crosscuts, both using shotcrete as the inner lining. Sprayed concrete is applied at a layer thickness of 15 cm in the rescue tunnel and of 20 cm in the crosscuts.

The protection of the environment with its natural thermal spring water posed a particular challenge throughout this project, because the thermal springs are important for the prosperity of the town of Bad Wildbad.

## PROJECT REQUIREMENTS

Sprayed concrete to a consistent quality in accordance with the strict specification: C30/37 / XD2 / XC4 / XF2 / GK8

## SIKA SOLUTIONS

Sika provided a comprehensive accelerator solution for the sprayed concrete for this challenging project. The sprayed concrete is batch produced in dry mix form and transported into the tunnel by concrete mixer trucks. Directly on-site the wet base mix is produced from the dry mix using a spindle mixer attached to the truck (Patented System by Rombold & Cfröhler GmbH & Co KG). About 2.1 t of the dry mix yields in 1 m<sup>3</sup> of continuously produced sprayed concrete fully meeting the application and performance requirements. Around 150 t of the dry mix have been processed every day on the site, according to this procedure.

## SIKA PRODUCTS

Sigunit® L-5601 AF

Sika®-PM 500

## PROJECT REQUIREMENTS

Owner: Karlsruhe Regional Council

Contractor: Östu-Stettin, A-8700 Leoben

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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